

POHATCONG VALLEY GROUNDWATER CONTAMINATION NEW JERSEY

EPA ID# NJD981179047



EPA REGION 2
CONGRESSIONAL DIST. 05
Warren County
Washington and Franklin Townships

Other Names:
Brass Castle-Broadway
New Jersey Water Company
Washington Borough Well Contamination

Site Description

The Pohatcong Valley Groundwater Contamination site involves the contamination of the Kittatinny Limestone Aquifer underlying the Pohatcong Valley. The aquifer serves as the sole source of drinking water for public and private parties in the area. The site includes portions of Franklin Township, Washington Township, and Washington Borough in the Valley and encompasses approximately 5,600 acres. Pohatcong and Shabbecong Creeks are the primary surface water drainage for the valley, both of which meander through the valley in the direction of the Delaware River. Analyses of two public water supply wells in 1978 and 1979 revealed high levels of tetrachloroethylene (TCE) and perchloroethylene (PCE), prompting the closing of one well and the installation of a carbon filtration system at the other. In 1984 and 1985, the Warren County Health Department identified a number of volatile organic compounds (VOCs), including TCE and PCE, in 79 private wells throughout the Valley. Affected residences have since been connected to the public water supply system, and the New Jersey Department of Environmental Protection (NJDEP) sealed most of the impacted wells. Approximately 12,000 people obtain drinking water from public and private wells within 3 miles of the site.

Site Responsibility: This site is being addressed through Federal, State, and County actions.

NPL LISTING HISTORY

Proposed Date: 06/24/88

Final Date: 03/30/89

Threats and Contaminants



Ground water in the Valley is contaminated with various VOCs, including primarily TCE and PCE. Use of contaminated private wells has been discontinued, and affected Pohatcong Valley residences are currently connected to a potable municipal water supply.

Cleanup Approach

This site is being addressed in two stages: immediate actions and long-term remedial phases. Immediate actions addressed contaminated public and private water supplies. Long-term actions address identification and remediation of sources of contamination.

Response Action Status



Immediate Action: In cases where the drinking water exceeded human health safety standards, Warren County supplied bottled water to affected residences. In 1988 and 1989, the NJDEP hooked up affected residences to public water supply wells. NJDEP continues to assess potential impacts from the groundwater contaminant plume by periodic residential monitoring.



Entire Site: The EPA has begun an extensive environmental investigation at the Site. EPA conducted geophysical studies to understand geological features of the Site in order to characterize the flow of groundwater and groundwater contamination. EPA initially identified 58 potential source areas in the valley, at which soil gas, soil, groundwater, surface water, sediment and/or ecological sampling have been performed during the first phase of a two-part study. Following this first phase, EPA narrowed the number of potential source areas to 10 areas. Upon completion of field work, a groundwater model will be developed, data gaps will be identified, and additional environmental sampling will be performed to locate source areas affecting ground water which will require clean up. In addition to the NJDEP efforts described above, EPA has also sampled well water at approximately 30 homes to further assess potential residential exposure to groundwater contamination; no additional residences were determined to be at risk. These wells will be sampled again in late Spring 2002 as part of Remedial Investigation field work.

Site Facts: EPA has initiated a Remedial Investigation (RI) and Feasibility Study (FS) for the Site. Field activities are being performed in two phases. The first phase was conducted between fall of 1999 and spring of 2000. Phase two activities are currently being conducted at the 10 potential source areas and are expected to be completed by Summer 2002.

Cleanup Progress



The provision of a safe drinking water supply has eliminated the potential of exposure to hazardous substances in the drinking water and will continue to protect the households near the Pohatcong Valley Groundwater Contamination site until cleanup activities are completed. RI/FS activities, including soil, soil gas, and groundwater sampling, and groundwater flow modeling, will focus on identification of contaminant source areas at industrial facilities in the Valley. Additional efforts will attempt to define the range and extent of soil and groundwater contamination in the Valley, and routes of exposure through human health and ecological risk assessments.

Site Repository



Warren County Free Public Library, 199 Hardwick Street, Belvidere, NJ 07823